Special Article

The Debriefing "Controversy" and Crisis Intervention: A Review of Lexical and Substantive Issues

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ABSTRACT: *Despite a long and rich history as a specialty within applied mental health, crisis intervention has, within recent years, been the target of criticism. Singled out for specific criticism has been the intervention referred to as "debriefing." Some authors have not only challenged its effectiveness but have raised the specter that it may cause significant harm. While superficially such arguments appear to have merit, closer scrutiny reveals an antiquated interpretation of even the most fundamental of terms and concepts inextricably intertwined with research based upon applications contrary to the most recent principles, prescriptions, and protocols regarding clinical use. A review of research based upon more extant formulations reveals many crisis intervention practices, including the Critical Incident Stress Debriefing model of "debriefing" and the Critical Incident Stress Management (CISM) model of crisis intervention to be highly clinically effective, indeed. This paper will review the terms and concepts which serve as the foundation of the field of crisis intervention, while subsequently reviewing key research investigations addressing its efficacy. It may be that outcome research directed toward assessing the effectiveness of crisis intervention can prosper from following trails blazed by psychotherapy researchers. The parallels seem striking. It may be that outcome research in crisis intervention (and "debriefing") needs to now focus upon "who" does crisis intervention, to "whom," and in "what specific situations," so as to maximize outcome associated with this clinically effective tool [International Journal of Emergency Mental Health, 2000, 2(4), 211-225].*

KEY WORDS: debriefing, emergency mental health, crisis intervention, Critical Incident Stress Debriefing (CISD), Critical Incident Stress Management (CISM)

The words we choose to express a thought or capture a concept not only represent a medium of communication, but they affect the opinions we hold, the rhetoric we proffer, even the "science" we teach. Psycholinguistic scholar Benjamin Lee Whorf postulated, in the formulation of what was to be known as the Whorfian hypothesis of linguistic relativity, that words have the power of shaping cognitive processes. In effect, words can shape how we think and the beliefs we hold. The poet T.S. Eliot once wrote that words decay with imprecision. It was George Engel, one of the pioneers in the field of psychosomatic medicine, who once said that a substantive issue in rational discourse is the

need to use terms consistently. Surely no discussion of issues, no debate about theory or research, nor any conduct associated with inquiry regarding effective practice can be meaningful, nor anything but pseudo-science, without a definition of, and agreement upon, fundamental terms and concepts. Indeed, the foundation of all scientific inquiry is reliability. Unfortunately, the field of emergency mental health, and crisis intervention per se, has been made unnecessarily complicated because of an imprecise and unreliable utilization of even the most fundamental of terms. Although the field enjoys a long and rich history, recently some terms have become distorted from their original formulations or current

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evolutionary representations. Most recently, for example, Kenardy (2000) has stated, "Psychological debriefing is broadly defined as a set of procedures including counseling and the giving of information aimed at preventing psychological morbidity and aiding recovery after a traumatic event" (p.1032). This definition of psychological debriefing while anchored in the historical literature (Mitchell, 1983) is clearly: a) not conducive to easily replicated empirical investigations due to a lack of specificity and standardization, and b) in juxtaposition to more recent formulations which have evolved over the last 25 years wherein the term "debriefing" refers to a standardized group crisis intervention. This paper will first review some of the terms that are fundamental to the practice of crisis intervention and the overall provision of acute psychological support. By reviewing such lexical foundations, some of the "differences of opinion" that exist in the field of crisis intervention may be better illuminated. Secondly, this paper will review empirically derived evidence as to the clinical efficacy of crisis intervention.

A Review of Basic Terms

"Crisis." A crisis may be thought of as a response to some aversive situation, manifest or anticipated, wherein:
1) psychological homeostasis (equilibrium) is disrupted;
2) one's usual coping mechanisms have failed to reestablish homeostasis; and,
3) there is evidence of functional distress or impairment (Caplan, 1961, 1964; Everly & Mitchell, 1999).

"Critical incident" is a term which refers to an event which is outside the usual range of experience and challenges one's ability to cope. The critical incident has the potential to lead to a crisis condition by overwhelming one's usual psychological defenses and coping mechanisms.

"Crisis intervention" is the natural operational corollary of the conceptualization of the term crisis. Consistent with the defining formulations of Caplan (1961, 1964), crisis intervention may be thought of as urgent and acute psychological "first aid," the hallmarks of which are:
1) immediacy, i.e., early intervention
2) proximity, i.e., intervention within close physical proximity to the acute crisis manifestation
3) expectancy, i.e., the expectation of the recipient is

that of an acute problem-focused intervention
4) brevity, i.e., the intervention will be short in the totality of its duration often lasting only one to three contacts, and
5) simplicity, i.e., simple, directive interventions seem to be the most useful, whereas, complex interventions which require a) the interpretation of unconscious motives, b) paradoxical intention, or c) confrontation should usually be avoided.

The goals of crisis intervention are:
1) stabilization, i.e., cessation of escalating distress thus keeping the response from worsening
2) mitigation of acute signs and symptoms of distress, dysfunction, or impairment, and,
3) restoration of adaptive independent functioning, if possible; or,
4) facilitation of access to a higher level of care (Everly & Mitchell, 1999). By virtue of the inclusion of this aspect of the definition, we render moot the notion that some individuals may be "too severely affected" to benefit from crisis intervention. The final obligation of the crisis interventionist is to provide for, or facilitate access to, services which will assist in the restoration of adaptive independent functioning in the wake of a traumatic, or critical, incident.

"Critical Incident Stress Debriefing" (CISD). Critical Incident Stress Debriefing (CISD) is actually a proper noun (Mitchell, 1983). CISD refers to one form, or model, of *group* crisis intervention, sometimes generically referred to as group psychological debriefing. As group psychotherapy is to individual psychotherapy, the group CISD is to individual crisis intervention. More specifically, CISD represents one author's approach (Mitchell & Everly, 1997) to group crisis intervention. CISD represents a highly structured form of group crisis intervention and represents a discussion of the traumatic, or critical, incident. The most current CISD model of psychological debriefing contains seven distinct stages, or phases. The CISD typically takes 1.5 to 3.0 hours to conduct. It is most commonly conducted 2 to 14 days after a critical incident. In cases of mass disasters, the CISD is not recommended until three to four weeks post disaster. The expressed intention of the CISD is to provide some facilitation of the process of psychological "closure" upon the traumatic, or critical, incident (i.e., the facilitation of the reconstruction process). When closure is not possible, the CISD may serve as a useful mechanism for psychological triage so as to

identify those who will need more advanced care. The CISD was originally formulated for use with emergency services personnel who were potential vicarious victims of traumas and critical incidents (Mitchell, 1983), but has been used with primary victims in a wide variety of setting including schools, businesses, industrial settings, the airline industry, and mass disasters. Historically, CISD represents the oldest and most commonly used non-military form of psychological debriefing which uses a standardized structure. But the roots of group debriefing actually date back to the military applications during World War II. Nevertheless, CISD is the root from whence the currently used generic term "debriefing," in the psychological sense, was originally derived. Its originator, Jeffrey T. Mitchell, Ph.D., contends that CISD was never intended to be a "stand-alone" intervention, nor a substitute for psychotherapy (Mitchell & Everly, 1997). Rather, the CISD is one form of group crisis intervention which represents one component within a larger crisis intervention program referred to as Critical Incident Stress Management (CISM; Everly & Mitchell, 1999).

A relatively new term, that has emerged in the crisis intervention literature within the last decade, is *"Critical Incident Stress Management."* (CISM; Everly & Mitchell, 1999). CISM refers to an integrated, multi-component crisis intervention system (Everly & Mitchell, 1999), in contradistinction to the singular crisis intervention formulations of the past. The CISM system consists of a multitude of crisis intervention technologies which span the crisis spectrum from the pre-crisis phase, through the acute crisis phase, to the post-crisis phase.

The historical evolution of the CISM system has, unfortunately, created considerable semantic confusion. Initially, Mitchell (1983) authored a paper on crisis intervention as it applied to emergency services personnel wherein the Critical Incident Stress Debriefing (CISD) process was described. Mitchell (1983) stated, "The CISD is an organized approach to the management of stress responses in emergency services. It entails either an individual or group meeting…"(p. 37). He went on to describe a multi-component crisis intervention approach which included a small group crisis intervention referred to as a formal critical incident stress debriefing (CISD). Considerable semantic confusion resulted from Mitchell's use of the term CISD to denote more than one thing: 1) the overarching framework for his crisis intervention system (CISD), 2) a specific six-phase small group discussion process ("formal"

CISD), and 3) the optional follow-up intervention (follow-up CISD). As a result, the current literature is plagued with references to "individual debriefings," and the perpetuated, but erroneous, notion that the CISD group discussion was intended to be a stand-alone, or "one-off" intervention. In an effort to rectify the lexical discord and expand the original formulations, the term Critical Incident Stress Management (CISM) was chosen as the term to denote the overarching, multi-component approach to crisis intervention, thus replacing the term CISD as it was originally used in that context. The term CISD is now used exclusively to denote what has become a specific seven-phase group crisis intervention process.

The program in TABLE 1 is a prototypic CISM system. It is an integrated, multi-componential system that is designed to be a "comprehensive" intervention system. The formulation offered herein is considered comprehensive because it consists of multiple crisis intervention components which functionally span the entire temporal spectrum of a crisis. Interventions range from the pre-crisis phase through the acute crisis phase, and into the post-crisis phase. The extant formulation is also considered comprehensive in that it consists of interventions which may be applied to individuals, small functional groups, large groups, families, organizations, and even communities. The core components of the program are defined below:

1) Pre-incident preparation. Pre-incident preparation may be thought of as a form of psychological "immunization." The goal is to strengthen potential vulnerabilities and enhance psychological resiliency in individuals who may be at risk for psychological crises and/or psychological traumatization. One important aspect of pre-incident preparation is the provision of information. Sir Francis Bacon once noted, "Information itself is power." Many crises and traumas result from a violation of expectancy, thus setting realistic expectations serves to protect against violated assumptions. But pre-incident preparation also consists of behavioral response preparation and rehearsal. This includes familiarization with common stressors, stress management education, stress resistance training, and crisis mitigation training for line personnel as well as management.

2) Disaster or large scale crisis intervention programs including *demobilizations, staff advisement, and crisis management briefings (CMB)*. The demobilization is an opportunity for temporary psychological "decompression"

Table 1: Critical Incident Stress Management (CISM): The Core Components
(Adapted from: Everly and Mitchell, 1999)

	INTERVENTION	TIMING	ACTIVATION	GOAL	FORMAT
1.	Pre-crisis preparation.	Pre-crisis phase.	Crisis anticipation.	Set expectations, Improve coping, Stress management.	Groups/ Organizations.
2a	Demobilizations & staff consultation (rescuers).	Shift disengagement.	Event driven.	To inform and consult, allow psychological decompression. Stress management.	Large groups/ Organizations.
2b.	Crisis Management Briefing (CMB) (civilians, schools, business).	Anytime post-crisis.			
3.	Defusing.	Post-crisis (within 12 hours).	Usually symptom driven.	Symptom mitigation. Possible closure. Triage.	Small groups.
4.	Critical Incident Stress Debriefing (CISD)	Post-crisis (1 to 10 days; 3-4 weeks mass disasters)	Usually symptom driven; can be event driven.	Facilitate psychological closure. Sx mitigation. Triage.	Small groups.
5.	Individual crisis intervention (1:1).	Anytime, Anywhere.	Symptom driven	Symptom mitigation. Return to function, if possible. Referral, if needed.	Individuals.
6.	Pastoral Crisis Intervention.	Anytime, Anywhere.	Whenever needed.	Provide spiritual, faith-based support.	Individuals/ Groups.
7a.	Family CISM.	Anytime.	Either symptom driven or event driven.	Foster support & communications. Symptom mitigation. Closure, if possible. Referral, if needed.	Families/ Organizations.
7b.	Organizational consultation.				
8.	Follow-up/Referral.	Anytime.	Usually symptom driven.	Assess mental status. Access higher level of care, if needed.	Individual/ Family.

immediately after exposure to a critical incident. This technique was originally developed for use by emergency services personnel. Staff advisement refers to the provision of psychological consultations to command staff (emergency services personnel, military, disaster response teams), as well as management personnel in business and industrial settings. The crisis management briefing (CMB) refers to a four-step crisis intervention for large groups of individuals (up to 300 at one time). The CMB is ideal for school crises, business and industrial crises, community violence and mass disasters (see Everly, 2000a; Newman, 2000).

3) *Defusing.* This is a 3-phase, 45 minute, structured small group discussion provided within hours of a crisis for purposes of assessment, triaging, and acute symptom mitigation. In some cases, the defusing may do much to foster psychological closure after a critical incident.

4) *Critical Incident Stress Debriefing (CISD)* refers to the 7-phase, structured group discussion, usually provided 1 to 14 days post crisis (although in mass disasters may be used 3 weeks or more post incident), and designed to mitigate acute symptoms, assess the need for follow-up, and if possible provide a sense of post-crisis psychological closure (Mitchell & Everly, 1997). In fact one of the great utilities of the CISD appears to be facilitating psychological reconstruction. Due to its structure, the CISD may take up to two to three hours to complete. The CISD will sometimes be used subsequent to the crisis management briefing and the defusing. The CISD is almost always followed by intervention on an individual basis with those individuals who require it. Referral for more formal mental health intervention may then follow.

5) *One-on-one crisis intervention/counseling* or psychological support throughout the full range of the crisis spectrum (this is the most frequently used of the CISM interventions). Typically, this form of intervention consists of 1 to 3 contacts with an individual who is in crisis. Each contact may last 15 minutes to more than 2 hours depending upon the nature and severity of the crisis. Although flexible and efficient, this form of crisis intervention lacks the added advantage of group process. Because of its extreme time-limited nature, it is especially important with this intervention as with all crisis interventions, to avoid using paradoxical interventions, interpretation of unconscious processes, or confrontational techniques (see Everly & Mitchell, 1999).

6) *Pastoral crisis intervention* (Everly, 2000b), more than ministerial or chaplaincy services, represents the integration of traditional crisis intervention with pastoral-based support services. In addition to traditional crisis intervention tools, pastoral crisis intervention may employ scriptural education, prayer (personal, conjoint, intercessory), rituals and sacraments, and the unique ethos of the pastoral crisis interventionist. A specialized form of crisis intervention, pastoral crisis intervention may not be suited for all persons or all circumstances, nevertheless, it represents a valuable addition the comprehensive CISM matrix.

7) *Family crisis intervention, as well as, organizational consultation* represent crisis intervention at the systems level. Both family and organizational crisis intervention, when done most effectively will possess proactive (pre-crisis) and reactive elements.

8) *Follow-up and referral mechanisms for assessment and treatment,* if necessary. No crisis intervention system is complete without the recognition that some critical incidents are so toxic by their very nature, that they will require a more intense and formalized intervention, perhaps even psychotropic medications. Therefore it is important to build into any crisis intervention system, a mechanism for follow-up assessment and treatment for those individuals for whom acute crisis intervention techniques prove insufficient. An important aspect of this element is the existence of a set of principles or guidelines for psychological triage (see Everly, 1999).

TABLE 1 further describes this crisis intervention system. Specific guidelines for these interventions may be found in Flannery (1998), Mitchell and Everly (1997), and Everly and Mitchell (1999).

It appears clear that one of the most potentially traumatogenetic critical incidents is the serious injury to, or death of, children (Dyregrov & Mitchell, 1992; Figley, 1995). Athey and her colleagues (Athey et al., 1997) specifically recommend the comprehensive CISM program for providers of emergency medical services to children. They conclude, "Institutionalizing and normalizing CISM for both large-scale and small events will help improve the emergency care system" (Athey et al., 1997, p. 467). Similarly, Shannon (1991) has commented upon the value of having this crisis intervention system available for those who provide emergency medical care, especially involving children. But multi-faceted CISM programs have been implemented in other traumatogenetic venues, as well.

A review of exemplary crisis intervention programs reveals that they tend to be integrated and multi-componential in

nature. Multi-component CISM crisis intervention programs appear to be emerging as the recommended industry standard, a virtual standard of care (Everly & Mitchell, 1999). Variations of the CISM model have been adopted by numerous and diverse organizations in a wide variety of workplace settings including the Federal Aviation Administration (FAA), the United States Air Force (1997 Air Force Instruction 44153), the United States Coast Guard (1999 COMDTINST 1754.3), the U.S. Secret Service, the Federal Bureau of Investigation (FBI), the Bureau of Alcohol, Tobacco, and Firearms (ATF), the Airline Pilots' Association (ALPA), the Swedish National Police, the Association of Icelandic Rescue Teams, the Australian Navy, the Australian Army, and the Massachusetts Department of Mental Health. Even the Department of Defense (1999 Directive 6490.5) has mandated attention be given to the prevention of combat stress reactions. In 1996, Occupational Safety and Health Administration (OSHA) document 3148-1996 recommended the implementation of comprehensive violence/crisis intervention programs in social service and healthcare settings. In 1998, OSHA 3153-1998 further recommended multi-component crisis intervention programs for late-night retail stores.

Research Findings and the Debriefing "Controversy"

The issue of the effectiveness of crisis intervention first emerged in the clinical literature in the 1960s. Artiss (1963) reported that the psychotherapeutic elements of immediacy, proximity, and expectancy had been employed successfully in military psychiatry to reduce psychiatric morbidity and increase return to combat rates for American soldiers. Solomon & Benbenishty (1986) confirmed with Israeli soldiers what Artiss had observed with the United States military. These authors concluded that early intervention, proximal intervention, and the role of expectation were each associated with positive outcome. Parad & Parad (1968) reviewed 1,656 social work cases and found crisis-oriented intervention to be effective in reducing florid psychiatric complaints and in improving patients' ability to cope with stress. Langsley, Machotka, & Flomenhaft (1971) followed 300 psychiatric patients randomly assigned to inpatient treatment or family crisis intervention groups. The crisis intervention group was found to be superior in reducing the need for subsequent hospital admissions at 6 and 18 month

intervals. A similar finding was recorded by Decker & Stubblebine (1972) using a single group 2.5 year longitudinal design. Finally, it was Bordow & Porritt (1979) who initially demonstrated, through randomized experimental design, that multicomponent crisis intervention was superior to single crisis tactics. Empirical evidence such as this argues for the effectiveness of early intervention, crisis-based psychological support tactics, while at the same time arguing against the attribution of psychotherapeutic exclusivity to traditional individual or group psychotherapy.

On first appearance, the issue of the effectiveness of psychological "debriefing" appears a more perplexing issue. Yet, careful scrutiny of relevant literature yields greater insight into this controversy. It may well be that the controversy surrounding debriefing is more lexical than substantive.

Initial concern over the effectiveness of psychological debriefings arose in the relevant literature with the publication of two Australian studies. McFarlane (1988) reported on the longitudinal course of posttraumatic morbidity in the wake of bush fires. One aspect of the study found that acute posttraumatic stress was predicted by avoidance of thinking about problems, property loss, and not attending undefined forms of psychological debriefings. However, chronic variations of posttraumatic stress disorder were best predicted by premorbid, non-event related factors, such as a family history of psychiatric disorders, concurrent avoidance and neuroticism, and a tendency not to confront conflicts. The delayed onset posttraumatic stress group not only had higher premorbid neuroticism scores, and greater property loss, but also attended the undefined debriefings. While these factors, when submitted to discriminant function analysis, only resulted in the correct identification of 53% of the delayed onset group, this study is often reported as evidence for lack of effectiveness of debriefings.

The second of the early negative outcome studies was that of Kenardy et al., (1996). Kenardy's investigation purported to assess the effectiveness of stress debriefings for 62 "debriefed helpers" compared to 133 who were apparently not debriefed subsequent to an earthquake in New Castle, Australia. This study is often cited as evidence for the ineffectiveness of debriefings, yet the authors state, "we were not able to influence the availability or nature of the debriefing. . . (p. 39). They continue, "It was assumed that all subjects in this study who reported having been debriefed did in fact receive posttrauma debriefing. However, there was no standardization of debriefing services. . ."(p.47).

These rather remarkable epistemological revelations by the authors have failed to deter critics of the "debriefing" process, whatever the term may mean.

Unfortunately, those who cite these investigations as "evidence" of the lack of effectiveness of "psychological debriefings" appear to have neglected the immutable empirical reality that failure to insure the standardization and reliability of the independent variable (debriefing) renders the results of the investigations unintelligible, ungeneralizable, and certainly not supportive of the null hypothesis, as some would contend. The sine qua non of research is internal validity; unfortunately, these studies possess no such validity as it pertains to the evaluation of the effectiveness of CISD.

Perhaps the greatest contention regarding the use of debriefings has arisen from reviews constructed by Wessely, Rose, & Bisson (1997), sometimes referred to as the Cochrane Report, and by Rose & Bisson (1998). These reviews are held out to be methodologically robust because they employ only investigations using randomization. The primary investigations which qualified for inclusion are discussed below:

1) Bisson, Jenkins, Alexander, & Bannister (1997) randomly assigned 110 patients with severe burns to either a "debriefing" group or a control group. The clinical standard *group* debriefing was abandoned for an *individual* adaptation. The goal of the randomization was not met in that the "debriefed" individuals had more severe burns and greater financial problems than the non-debriefed individuals, thus direct comparison was inappropriate. These variables were later associated with poorer outcome. The "debriefed" group had more severe traumatic stress scores at 13 months. Despite the lack of equivalent groups and the failure to follow standard clinical protocols for group debriefings, these authors contend that the results cast serious doubt upon the utility of debriefings.

2) Hobbs, Mayou, Harrison, & Worlock (1996) performed a randomized trial of debriefings for 106 (54 debriefed; 52 control) motor vehicle accident victims. Once again randomization failed to achieve equivalent groups for comparison in that the individuals who were debriefed had more severe injuries and spent more days in the hospital. Both factors predicted poorer psychological outcome. Similarly, the clinical standard group process was abandoned so as to employ individual debriefings. The individuals receiving the debriefings had higher traumatic stress scores

at follow-up. These data have been used to argue that debriefing may be injurious, yet the actual traumatic stress scores were not in a clinical range at any time, and the overall change went from 15.13 to 15.97 (clinical ranges begin around 26). Such a change has no clinical significance whatsoever, and therefore cannot be construed as harmful. In a 4-year longitudinal follow-up investigation, Mayou, Ehlers, and Hobbs (2000) found the intervention group (individualized debriefings) remained symptomatic. Once again, however, the group debriefing process was not used, and the debriefing was used in a stand-alone manner (contrary to a multi-component prescription including follow-up). It seems a non-sequitur to conclude that psychological debriefing is ineffective and to further conclude that it is inappropriate for trauma patients when the debriefing process was individualized, as opposed to the group format, and when the debriefing was taken out of its prescribed multi-component context and applied to medical patients. The internal validity of these two investigations seems suspect at best, further, it seems impossible to generalize from these studies to any other debriefing protocols.

3) Lee, Slade, & Lygo (1996) assessed the effectiveness of individual debriefing on women following miscarriages. No significant changes were attributed to debriefings. In a more recent variation, Small et al. (2000) used "debriefing" subsequent to operative childbirth (Caesarean, forceps, or vacuum delivery). Once again individual debriefing was employed, as opposed to group debriefing. The debriefing took place prior to hospital discharge, while the psychological assessment took place at six months post childbirth. Unfortunately, the debriefing process, as operationalized in this study, was not specifically described. The reported results indicated that 94% of the women in the debriefing group found the debriefing either "helpful" or "very helpful" (n = 437/463).The intervention was found to be ineffective on the targeted symptoms of depression, as would be predicted. Debriefing is not a substitute for psychotherapy. Nevertheless, the authors surprisingly conclude this study fails to support the utility of debriefings.

4) Bordow & Porritt (1979) assessed the effectiveness of a multicomponent CISM-like crisis intervention on three groups of motor vehicle accident victims. The control group received no intervention, the second group received a one-session individual assessment/intervention, while the third group received the same as the second group plus 2-10 hours of crisis intervention. Results indicated a positive dose-

response relationship with intervention.

5) Bunn & Clarke (1979) conducted an experimental evaluation of brief intervention on anxiety symptoms for the relatives of seriously ill hospital patients. The intervention consisted of about 20 minutes of crisis counseling in which subjects received information, psychological support, and an opportunity to vent. Subjects were randomly assigned to experimental and control conditions. Results were supportive of the assumption that brief crisis counseling is an effective anxiolytic.

The results of these oft-cited reviews appear self-evident. First, none of these studies actually assessed the effectiveness of the international clinical standard in debriefing, the CISD model of debriefing. Therefore, they lack generalizability, specifically to CISD. Their lack of precise refinement of the independent variables make any pursuit of external validity difficult, at best, and would seem to restrict the utility of their findings to the idiosyncratic nature of their unique interventions. Therefore, rather than support the notion that group debriefings are ineffectual and may be harmful, these data would appear to support a very different set of conclusions.

First, these studies would appear to support the conclusion that clinicians should use caution implementing a group crisis intervention protocol with individuals singularly (Busuttil & Busuttil, 1995). Obviously, none of the therapeutic elements of group process (Yalom, 1970) are available to be used when a group protocol is employed one patient at a time. This would appear similar to attempting group psychotherapy protocols with individual psychotherapy patients.

Secondly, these findings would suggest caution with the use of individualized psychological crisis intervention tactics with primary medical patients within minimal temporal distance from their medical stressors, or with primary medical patients with ongoing medical stressors. Turnbull, Busuttil, and Pittman (1997) argue that such applications are inappropriate due to the timing of the intervention and the nature of the patients' crisis event or trauma. As a crisis intervention tactic, group debriefing is best suited for acute situational crisis responses. Debriefings are certainly not a substitute for psychotherapy, psychotropic medication, analgesics, or psychological rehabilitation.

Thirdly, the studies which used debriefing absent a positive outcome appeared to use the debriefing as a stand-alone intervention, outside of the prescribed multi-faceted CISM-like context (Everly & Mitchell, 1999). Kraus (1997) argues that debriefing should not be a stand-alone intervention, in agreement with Everly and Mitchell (1999) and the British Psychological Society (1990).

Fourth, given these admonitions, these findings appear to support the implementation of individual crisis counseling (Bunn & Clarke, 1979), and multi-component CISM-like interventions (Bordow & Porritt, 1979), as suggested earlier in this review. Unfortunately, no conclusions regarding group debriefings, in general, or CISD, in specific, can be made from these data (Everly & Mitchell, 1999; Robinson & Mitchell, 1995; Dyregrov, 1998).

To paraphrase the philosopher/ psychologist William James, "To disprove the assertion that all crows are black, one need only find one crow that is white!" Therefore, to disprove the assertion that all debriefings are ineffectual, one need only find one debriefing that is effective!

In support of debriefings, but specifically the CISD model of group psychological crisis intervention, we find several investigations: Robinson & Mitchell, (1993, 1995) with emergency medical services personnel; Nurmi (1999) with rescue personnel in the wake of the sinking of the Estonia; Wee et al., (1999) with emergency medical technicians subsequent to the Los Angeles riots; Bohl (1991) with police; Chemtob et al. (1997) with healthcare providers subsequent to Hurricane Iniki; and Jenkins (1996) with emergency medical personnel in the wake of a mass shooting. All of these investigations offer varying degrees of evidence for the effectiveness of the CISD intervention. In each of the studies cited, emergency services or other healthcare personnel were the recipients of the CISD intervention. Each of these studies, however, may be criticized for their lack of randomized subject assignment. However, four of the aforementioned studies possessed a static control condition, while one possessed a time-lagged control. These research designs are known to be vulnerable to selection, mortality, and maturation as threats to internal validity and the selection-intervention interaction threat to external validity (Campbell & Stanley, 1963). In order to partially compensate for the vulnerabilities and derive greater insight from their collective findings, Everly and Boyle (1999) subsequently meta-analyzed five of the aforementioned studies possessing control conditions. Perhaps the greatest singular value of randomization is the protection against systematic experimental error. One of the advantages of meta-analysis is that through combining investigations of diverse investigators using diverse subject

populations in diverse naturalistic settings, the researcher is provided a large subject pool that is minimally vulnerable to systematic error, i.e., a similar goal as randomization. The results of the meta-analysis found cumulative evidence suggesting that the CISD is, indeed, clinically effective across applications (Everly & Boyle, 1999). This meta-analytic investigation revealed statistical sufficiency far in excess of that required to demonstrate reliability of the clinical effect (Nfs_n=35, Nfs_o=91). Most recently Watchorn (2000) has shown that group debriefings serve to prevent the development of PTSD. More specifically, the author concludes that peritraumatic dissociation predicts long-term impairment, but for those who dissociated, subsequent debriefings were associated with less impairment. Similarly, Deahl et al. (2000), in the only randomized investigation of the CISD model of debriefing, found CISD effective in reducing alcohol use and symptoms of anxiety, depression, and PTSD. This investigation was conducted with 106 British soldiers involved in a United Nations' peacekeeping mission. Soldiers were randomly assigned to a debriefing condition or a no debriefing condition. In addition, all soldiers received an Operational Stress Training Package. At the 6-month follow-up, the debriefed group evidenced a lower prevalence of alcohol use and lower scores on psychometrically assessed anxiety, depression, PTSD symptoms. Thus current evidence is compellingly supportive of the CISD model of debriefing as a means of mitigating adverse psychological responses to critical incidents and even more severe traumatic events. But it should be kept in mind that debriefings were not designed to be a stand-alone intervention. Rather, as noted earlier, the British Psychological Society (1990) and Mitchell and Everly (1997; Everly & Mitchell, 1999) argue that crisis intervention should be multi-faceted. Crisis intervention should be a multi-component endeavor, a fact that is often forgotten in actual practice.

The effectiveness of integrated multi-component CISM programs has now been suggested through thoughtful qualitative analyses (Everly, Flannery & Mitchell, 2000; Everly & Mitchell, 1999; Miller, 1999; Dyregrov, 1997, 1998 1999; Mitchell & Everly, 1997), as well as through empirical investigations, and even meta-analyses (Flannery, 1998; Flannery, Penk, & Corrigan, 1999; Flannery et al., 1995; Flannery et al., 1998; Flannery et al., 2000; Mitchell, Schiller, Everly, & Eyler, 1999; Everly, Flannery, & Eyler, in press, Flannery, Everly, & Eyler, 2000; Western Management Consultants, 1996). Flannery's ASAP program is an exemplary CISM crisis intervention approach (Flannery, 1998, 1999a, 1999b, 1999c) used in hospitals, clinics, and schools. Research has consistently shown the ASAP program to be an effective crisis intervention, but ASAP is curiously seldom cited in reviews of crisis intervention. A recent meta-analysis of five ASAP studies found the Cohen's d meta-analytic coefficient to be in excess of 3.00 showing a highly significant and powerful clinical effect (Flannery, Everly, & Eyler, 2000). Most recently, Flannery (in press) has reviewed 14 peer reviewed publications on the ASAP CISM intervention. The review, spanning ten years of published data supports the conclusion that the ASAP CISM intervention model is an effective model of crisis intervention. These data would appear to further serve as justification for the establishment of CISM programs within high-risk occupational groups. These data represent the longest ongoing investigation of a standardized model of crisis intervention available in written record. Richards (1999) has demonstrated the relative superiority of the multi-component CISM compared to the singular CISD, consistent with expectations. In the latest and largest meta-analytic investigation of CISM, Everly, Flannery, & Eyler (in press) found a Cohen's d of 3.1 and a fail-safe number of 792 when combining eight investigations. These findings are indicative of a powerful clinical effect exerted by the CISM programs.

Critics of CISD and/or CISM point out that the investigations supporting such forms of crisis intervention are mostly of a quasi-experimental nature, which is curious in that the review above revealed that the investigations which call into question the effectiveness of crisis intervention, generally, and CISD or CISM, specifically, reveals the lack of a clearly defined and standardized intervention (independent variable). Indeed, many studies which purport to assess debriefings failed to actually employ the standardized group CISD or integrated CISM protocols. As Richards (1999) has noted, the research investigations which most challenge the effectiveness of group crisis interventions sacrifice internal content validity in order to achieve experimental control. In this process, the outcomes are rendered inapplicable to a genre of crisis intervention technologies, yet are more a commentary of the ill-defined experimental interventions that were actually employed and/ or the clinical skill of the interventionists themselves. The standardized multi-component CISM approach (Everly & Mitchell, 1999) to crisis intervention is designed to remedy this short-coming by offering an intervention "manual" of

sorts which can enhance the content validity of the independent variable as well as the external validity.

Clearly, randomized research designs which can assess the effectiveness of crisis intervention are certainly welcomed, if they can be instituted without sacrificing internal content validity. It was noted earlier that CISM has been submitted to meta-analytic scrutiny and initially found to be effective on the basis of empirical investigations (Everly, Flannery, & Eyler, in press; Flannery, Everly, & Eyler, 2000). Although the component investigations were quasi-experimental, they are not without epistemological value for several reasons. First, the use of such designs, even single case designs, can be useful in contributing meaningful data to the conduct of inquiry (Herson & Barlow, 1976; Blampied, 2000). Second, faithful adherence to the standardized protocols (specifically CISD or CISM) serves as the foundation of internal validity and serves to enhance specified external validity. Third, the use of meta-analysis serves to diminish the likelihood of systematic error across the participant investigations and compensate for specific threats to internal validity. Fourth, the use of meta-analysis with diverse recipient groups also serves to enhance the external validity of the meta-analytic findings supporting the effectiveness of CISD and CISM. Fifth, the use of combinatorial meta-analytic strategies increases the power of the findings by increasing the sample population thus increasing the credibility of the subsequent findings (Seligman, 1995). Nevertheless, randomized designs are certainly welcomed in the future.

Conclusion

Swanson and Carbon (1989) writing for the American Psychiatric Association Task Force Report on Treatment of Psychiatric Disorders state, "Crisis intervention is a proven approach to helping in the pain of an emotional crisis" (p. 2520). While there is a compelling logic to support the notion of early psychological intervention subsequent to a critical incident, while there is evidence to support the use of CISD and CISM, continued empirical validation and clinical refinement are worthy pursuits for the future. Although not supported by applicable empiricism, there remains among some researchers a seemingly dogmatic belief that crisis intervention, CISD, and/or CISM represent potentially harmful interventions. One must always acknowledge the risk associated with human healthcare. This is true in the practice of medicine, nursing, surgery, psychotherapy, and even crisis intervention. But, it seems the most prudent approach to this issue lies in an examination of, not only the intervention itself, but in an examination of issues with regard to the training qualifications of the interventionists, the timing of the intervention, and the suitability of the intervention for the recipient groups and/or the nature of the adversity (e.g., acute situational adversity versus chronic illness, ongoing psychosocial discord, physical pain, physical scarring, protracted legal difficulties, a long-term rehabilitative process, etc.). Clearly, crisis intervention technologies such as CISD and CISM are best directed toward acute situational adversity, well circumscribed stressors, and acute adult-onset traumatic reactions (Dyregrov, 1997, 1998, 1999; Richards, 1999; Everly & Mitchell, 1999). Thus, the inclusion of crisis intervention in any review of "treatments" for PTSD (Foa, Keane, & Friedman, (2000) seems questionable. Crisis intervention is not a form of therapy per se, nor a substitute for treatment. Crisis intervention, in general, and CISD and CISM, specifically, are designed to compliment more traditional psychotherapeutic services. This is readily apparent if one understands that one of the expressed goals of the CISD is to assess the need for continued care, and that the final component of the muilti-component CISM program is the facilitation of a person in crisis to the next level of care, if appropriate.

Dyregrov (1998) has stated, "In my opinion the debate on debriefing is not only a scientific but also a political debate. It entails power and positions in the therapeutic world. As a technique. . .[debriefings] represented a threat to the psychiatric elite." Certainly, at the very least, the debriefing "controversy" is grounded in the semantics of what actually constitutes a debriefing and the applied role of the debriefing in the overall CISM context. In this, we have been very specific about the nature of the debriefing process (CISD), and the overall crisis intervention process (CISM) for we agree with George Engle that rational discourse is, indeed, grounded upon use of terminology in a consistent manner and the consistent operationalization of that same terminology. Reviewing the available literature, both narrative and empirical, the evidence clearly supports the effectiveness of CISD and CISM.

Recalling the research investigations reviewed in this paper an evolutionary trend clearly emerges which may serve as the best summary of both the lexical as well as substantive issues in the field at this point in time. We shall conclude this

paper with a summary of that trend:

1) The term "debriefing" as an unspecified intervention. The early first generation of "debriefing" studies (McFarlane, 1988; Kenardy et al., 1996) could not define the term debriefing, nor could they describe what actually happened, if anything, during the debriefing. Their contribution to our understanding of debriefing is to underscore the need to verify the nature and existence of the intervention.

2) The use of the term "debriefing" to mean individual counseling and individual early intervention with medical patients. The second generation of "debriefing" studies was conducted with medical patients using an individualized intervention format (Bisson et al., 1997; Hobbs et al., 1996; Mayou, Ehlers, & Hobbs, 2000; Lee, Slade, & Lygo, 1996; Small et al., 2000). Their contribution to our understanding of debriefing is that a) crisis intervention is clearly not a substitute for psychotherapy but may be very helpful nevertheless (Small et al., 2000), b) crisis intervention is probably not suitable for patients in acute medical distress in that it is not a substitute for analgesia, physical rehabilitation, psychological rehabilitation, reconstructive surgery, or financial counseling. These studies have also clearly shown that it is premature to reach any adverse conclusions with regard to debriefings (Bisson, McFarlane, & Rose, 2000).

3) The use of the term "debriefing" to mean Critical Incident Stress Debriefing (CISD). The third generation of debriefing studies employed the CISD model of group-format debriefing (Mitchell & Everly, 1997). These studies conducted by Nurmi (1999), Bohl (1991), Chemtob et al. (1997), Wee et al (1999), Jenkins (1996), Everly and Boyle (1999) in a meta-analytic investigation, Deahl, et al. (2000) in a randomized design, and Watchorn (2000) clearly support the assertion that the CISD

model of "debriefing" can be an effective clinical tool for reducing psychological distress, reducing alcohol use, and in preventing PTSD. Their contribution to our understanding of "debriefing" is demonstrating the value of a standardized, theoretically based, empirically developed protocol for small group crisis intervention.

4) Finally, the use of the term "debriefing" to refer to multi-component crisis intervention programs is clearly a misnomer. The term Critical Incident Stress Management (CISM), as defined earlier, is the term indicative of a comprehensive, multi-faceted approach to crisis intervention (Everly & Mitchell, 1999; Flannery, 1998). Studies such as the randomized trial conducted by Bordow & Porritt (1979) and the pre-test post-test open outcome in-patient investigation conducted by Busuttil et al (1995) provided early support for the necessity of a multi-faceted, CISM-like approach. Later studies by Flannery (Flannery, Everly, & Eyler, 2000), Everly (Everly, Flannery, & Eyler, in press), and Richards (1999) have shown repeatedly that the CISM approach to crisis intervention is a clinically effective intervention. The contribution of these studies to our current understanding of the larger field of crisis intervention is the notion that crisis intervention should not consist of a single intervention, but rather, should be an integrated multi-faceted intervention (British Psychological Society, 1990; Mitchell & Everly, 1997; Turnbull, Busuttil, & Pittman, 1997; Richards, 1999; Bordow & Porritt, 1979). As Bisson, McFarlane, & Rose (2000) have stated, one-shot debriefing as a stand-alone crisis intervention cannot be recommended at this time, but there is evidence that debriefing, as part of a multi-faceted crisis intervention, is well received by most people. TABLE 1 offers a prototypic multi-component CISM approach to crisis intervention.

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